Bruhat Bangalore Mahanagara Palike
Executive Engineer Yelahanka Project Division

Name of Work: Modified Estimate for Improvements to Roads and Drains At Kogilu Colony In Ward no.05

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Civil Work								
1	Removing and resetting of Footpath slab (P.No.270, I.No.37.56 of PW, P&IWTD SR 2018-19)								
		Sqm							
	Kogilu Layout								
	Opp To Masid Main Rd		1	45.90	1.50		68.85		
							68.85	**219.00**	**15,078.15**
		Approved Amount		**219.00**					
2	KSRRB M200-12.1. **Dismantling of existing structures** like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications. By Manual Means :B. Cement Concrete Grade M-15 & M-20. (P.No. 139, I.No. 18.20 of CSR 2018-19)								
		Cum							
	Kogilu Colony								
	Cross Rd-3		1	18.30	4.00	0.20	14.64		
	Poojamma Temple Surrounding		1	70.00	5.85	0.20	81.83		
	Front Side Temple (Near Sump Tank)		1	23.90	5.81	0.20	27.75		
	Inside Slum Area		1	68.90	3.47	0.20	47.79		
	Choknahalli Cross Rd		1	108.00	6.04	0.20	130.40		
							302.41	**526.00**	**159065.63**
		Approved Amount		**526.00**					
3	KSRRB 300-1. **Earthwork excavation** by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 (P.No.143, I.No.19.1 of PW, P&IWTD SR 2018-19)								
		Cum							
	Drain Desilt								
	Kogilu Colony								
	Kogilu Main Rd RHS		1	24.70	0.90	0.70	15.56		
	Indira Canteen Backside		1	52.20	0.60	0.55	17.23		
	Near Temple		1	26.00	0.60	0.55	8.58		
	Maramma Temple Rd		2	83.70	0.45	0.55	41.43		
	Kogilu Layout								
	Opp To Masid Main Rd		1	83.80	0.60	0.55	27.65		
	RCC DRAIN								
	Kogilu Colony								
	Cross Rd-1		1	52.40	1.10	1.00	57.64		
	Cross Rd-2		1	52.60	1.10	1.00	57.86		
	Cross Rd-3		1	24.70	1.10	1.10	29.89		
	Inside Slum Area		2	68.90	0.99	0.95	129.60		

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Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Opposite to Haj-Bhavan Rd (RHS)		1	106.50	1.10	1.10	128.87		
	Opposite to Haj-Bhavan Rd (LHS)		1	23.00	1.10	1.10	27.83		
	Kogilu Layout								
	5th Cross Rd(Right Side) LHS		1	69.30	1.10	1.10	83.85		
	5th Cross Rd(Right Side) RHS		1	89.60	1.10	1.00	98.56		
	RCC CULVERT		13	6.22	1.55	1.00	125.33		
							849.88		
			Upto 125%				135.00	237.00	31,995.00
			Above 125%				714.88	237.00	169426.89
		Approved Amount	237.00						
4	KSRRB M300-14. **Excavation for roadwork** in all types of soil by mechanical means including cutting and loading to tippers, trimmingbottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications. MORTH Specification No.301 (P.No.143, I.No.19.14 of PW,P&IWTD S.R 2018-19)								
		Cum							
							0.00	135.00	0.00
		Approved Amount	135.00						
5	KSRRB M2100-10. **Providing and laying Plain cement concrete of mix 1:3:6** with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications.(P.No.13, I.No.4.2 of PW, P&IWTD SR 2018-19)								
		Cum							
	RCC DRAIN								
	Kogilu Colony								
	Cross Rd-1		1	52.40	1.10	0.15	8.65		
	Cross Rd-2		1	52.60	1.10	0.15	8.68		
	Cross Rd-3		1	24.70	1.10	0.15	4.08		
	Inside Slum Area		2	68.90	0.99	0.15	20.40		
	Opposite to Haj-Bhavan Rd (RHS)		1	106.50	1.10	0.15	17.57		
	Opposite to Haj-Bhavan Rd (LHS)		1	23.00	1.10	0.15	3.80		
	Kogilu Layout								
	5th Cross Rd(Right Side) LHS		1	69.30	1.10	0.15	11.43		
	5th Cross Rd(Right Side) RHS		1	89.60	1.10	0.15	14.78		
	RCC CULVERT		13	6.22	1.55	0.15	18.80		
							108.19	5780.00	625325.14
		Approved Amount	5780.00						

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Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
6	Providing and laying plain/reinforced cement concrete for side drains using **M20 nominal mix concrete with OPC at 300 kgs.** with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500, 1700, 2200. including cost of materials, labour, HOM complete as per specificationsdo- Wall & bottom thickness 15cm (P.No.275, I.No.37.59.2 of PW, P&IWTD SR 2018-19)								
		Cum							
	Drain Raft								
	Kogilu Colony								
	Cross Rd-1		1	52.40	0.90	0.15	7.07		
	Cross Rd-2		1	52.60	0.90	0.15	7.10		
	Cross Rd-3		1	24.70	0.90	0.15	3.33		
	Inside Slum Area		2	68.90	0.80	0.15	16.43		
	Opposite to Haj-Bhavan Rd (RHS)		1	106.50	0.90	0.15	14.38		
	Opposite to Haj-Bhavan Rd (LHS)		1	23.00	0.90	0.15	3.11		
	Kogilu Layout								
	5th Cross Rd(Right Side) LHS		1	69.30	0.90	0.15	9.36		
	5th Cross Rd(Right Side) RHS		1	89.60	0.90	0.15	12.10		
	Drain Wall								
	Kogilu Colony								
	Cross Rd-1		2	52.40	0.15	0.61	9.56		
	Cross Rd-2		2	52.60	0.15	0.60	9.47		
	Cross Rd-3		2	24.70	0.15	0.60	4.45		
	Inside Slum Area		4	68.90	0.15	0.55	22.74		
	Opposite to Haj-Bhavan Rd (RHS)		2	106.50	0.15	0.60	19.17		
	Opposite to Haj-Bhavan Rd (LHS)		2	23.00	0.15	0.60	4.14		
	Kogilu Layout								
	5th Cross Rd(Right Side) LHS		2	69.30	0.15	0.60	12.47		
	5th Cross Rd(Right Side) RHS		2	89.60	0.15	0.60	16.13		
	Drain Coping						**171.00**		
	Kogilu Colony								
	Kogilu Main Rd RHS		2	24.70	0.20	0.10	0.99		
	Indira Canteen Backside		2	52.20	0.20	0.10	2.09		
	Maramma Temple Rd		4	83.70	0.20	0.10	6.70		
							9.77		
							180.77	**7423.00**	**1341847.62**
		Approved Amount		**7423.00**					

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Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
7	Providing and laying in position plain/Reinforced cement cement concrete **M20 for sub-structure/Superstructure works, with cement @ 320 kgs,** 20 mm & down size graded granite metal coarse aggregate @ 0.69 cum and fine aggregates @ 0.46 cum machine mixed with super plasticisers @ 3 lts confirming to IS 9103-2008,concrete laid in layers, well compacted and providing weep holes wherever necessary. with necessary scaffolding, form work etc., including cost of labour, HOM curing etc., complete (P.No.257, I.No.34.17 of PW, P&IWTD SR 2018-19)								
		Cum							
	Culvert Raft		13	6.22	1.44	0.23	26.71		
	Culvert Wall		26	6.22	0.23	0.60	22.32		
							49.02	**5541.00**	**271640.88**
		Approved Amount		**5541.00**					
8	KSRB 4-6.1 : Providing and **removing centering**, shuttering, strutting, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.1 (P.No.16, I.No.4.28 of PW,P&IWTD SR 2018-19)								
		Sqm							
	Culvert Raft		26	6.22		0.23	37.20		
							37.20	**287.00**	**10,675.14**
		Approved Amount		**287.00**					
9	KSRB 4-6.1 : Providing and **removing centering**, shuttering, strutting, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.1 (P.No.16, I.No.4.31 of PW,P&IWTD SR 2018-19)								
		Sqm							
	Culvert Wall		52	6.22		0.60	194.06		
							194.06	**398.00**	**77,237.47**
		Approved Amount		**398.00**					
10	KSRB 4.9.2 : Providing **T.M.T steel reinforcement** for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specifications (P.No.18, I.No.4.46.2 of PW, P&IWTD SR 2018-19).								
		Tn							
	For Drain 65kg/cum			171.00	0.065		11.11		
	For Culvert 90kg/cum			49.02	0.090		4.41		
							15.53	**78978.00**	**1226286.76**
		Approved Amount		**78978.00**					
11	Providing and fixing RCC Precast cover slab of **100mm thick** for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge.(Data Rate)								
		Sqm							
	Kogilu Colony								
	Cross Rd-1		1	52.40	0.90		47.16		
	Cross Rd-2		1	48.80	0.90		43.92		
	Cross Rd-3		1	24.70	0.90		22.23		
	Inside Slum Area		2	60.20	0.90		108.36		

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Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Opposite to Haj Bhavan Rd (RHS)		1	106.50	0.90		95.85		
	Kogilu Layout								
	5th Cross Rd(Right Side) LHS		1	69.30	0.90		62.37		
	9th Cross Rd(Right Side) RHS		1	89.60	0.90		80.64		
	Kogilu Colony								
	Kogilu Main Rd RHS		1	18.30	0.90		16.47		
	Indira Canteen Backside		1	52.20	0.60		31.32		
	Near Temple		1	10.00	1.20		12.00		
	Maramma Temple Rd LHS		1	83.70	0.60		50.22		
	Maramma Temple Rd RHS		1	31.50	0.60		18.90		
	Missing slab		31	0.60	0.90		16.74		
	Kogilu Layout								
	1st Cross Rd LHS		1	227.80	0.90		205.02		
	1st Cross Rd RHS		1	230.00	0.90		207.00		
							1018.20		
			Upto 125%				690.38	2454.00	1694180.25
			Above 125%				327.83	2454.00	804482.55
		Approved Amount		2454.00					
12	Providing and Fixing pre cast covering Slab **250mm thick** made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge.(Data Rate)								
		Sqm							
	RCC CULVERT		9	6.30	1.50		85.05		
			3	5.70	1.20		20.52		
							105.57	5688.00	600482.16
		Approved Amount		5688.00					
13	KSRRB M600-1.Providing and **Constructing dry lean cement concrete mix CC 1:5:10** base with OPC 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @0.58cum over a prepared sub-base, coarse and fine aggregate conforming to IS: 383-2016,aggregate cement ratio not to exceed 15:1, Aggregate gradation after blending to be as per Table 600-1,optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. Clause 601of MORTH V Revision and IS 456 Table-5 ((P.No.174, I.No.22.1.1 of PW,P&IWTD SR 2018-19)								
		Cum							
	Kogilu Colony								
	Cross Rd 3		1	18.30	4.00	0.15	10.98		
	Poojamma Temple Surrounding		1	70.00	5.85	0.15	61.37		
	Front Side Temple (Near Sump Tank)		1	23.90	5.81	0.15	20.81		
	inside Slum Area		1	68.90	3.47	0.15	35.84		
	Chaknahalli Cross Rd		1	108.00	6.04	0.15	97.80		
							226.80	3990.00	904950.37
		Approved Amount		3990.00					

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Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 with OPC at 380 kg/cum and coarse aggregate 0.69cum, fine aggregate 0.46cum. over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints,including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine, and curing including cost of all materials, labour,hire charges of machineries,all lead & lift charges etc., complete as per specifications.((P.No.176, I.No.22.6.1 of PW,P&IWTD SR 2018-19)								
	Cum							
Kaglu Colony								
Cross Rd-3		1	18.30	4.00	0.15	10.98		
Poojamma Temple Surrounding		1	70.00	5.85	0.15	61.37		
Front Side Temple (Near Sump Tank)		1	23.90	5.81	0.15	20.81		
Inside Slum Area		1	68.90	3.47	0.15	35.84		
Cholnahalli Cross Rd		1	108.00	6.04	0.15	97.80		
						226.80	5471.00	1240847.99
	Approved Amount		5471.00					
Vaccum de-watering with vaccum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator, HOM of machinery, Screed Vibratory, Power Floater, blade and disc etc., with all lead and lift. (P.No 176, I.No.22.7 of PW,P&IWTD S.R 2018-19)								
	Sqm							
Kaglu Colony								
Cross Rd-3		1	18.30	4.00		73.20		
Poojamma Temple Surrounding		1	70.00	5.85		409.15		
Front Side Temple (Near Sump Tank)		1	23.90	5.81		138.74		
Inside Slum Area		1	68.90	3.47		238.95		
Cholnahalli Cross Rd		1	108.00	6.04		652.00		
						1512.03	75.00	113402.30
	Approved Amount		75.00					
							Total Construction Cost	9286924.31
							Miscellaneous & Rounding Off	1,507.11
							Total	9288431.42

Technical Sanction
Accorded For .....
Head of A/C .....
CER NO : ..... Dt: 21

ITA1 — CE (NJNK)

Assistant Engineer

Asst. Executive Engineer

Executive Engineer

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